

## REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1-3.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Brooks '012 or Champagne '381, combined with Ramannujam et al., "Instant holography", Appl. Phys. Lett., Vol. 74(21) (May 1999).

Further, claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Brooks '012 or Champagne '381, combined with Natansohn et al. '381, Bieringer et al. '846, Eich et al. '859 and Savant et al. '221.

These rejections are respectfully traversed.

The present invention is directed to a method for optical information recording by a specific dual light beam irradiation of a polymeric recording film, as recited in the "improvement" portion of claim 1. One light beam is for bias illumination and the other for writing.

In the present method for optical information recording, it is not necessary that the light beam for bias illumination be a coherent light beam having interferability with the writing light beam. Thus, the exact same results can be obtained even by illumination with another independent incoherent non-laser light beam.

On the other hand, the subject matter of the cited references relates to holographic recording by the illumination of a medium or target with a coherent light beam so that the subject matter of claims 1-3 is unobviously different from that of the references, even if the recording systems illustrated in the drawings may have some similarity to each other.

The rejection contends that Champagne teaches the use of double exposure holograms in defect or stress analysis, pointing out that the area of the recording medium (64 or 92 in Figures 1 and 3) exposed to the object beam (52, 82 and 88) is less than that illuminated by the reference beams (68 and 96). As is clear from this disclosure, the subject matter of Champagne is analysis or detection of defects or stresses in the sample plate and not information recording as in the present invention.

In Brooks (Figure 1) there is depicted a method for recording microholograms by simultaneous illumination of a target specimen 20 with two light beams 14 and 15, of which the first beam 14 falls on the target 20 over an area (first irradiation spot) without being focused while the second light beam 15 is very sharply focused (second irradiation spot) aside the first irradiation spot.

This arrangement of the two light beams or irradiation spots is clearly distinguishable from and unsuggestive of the invention of claim 1 in which the second irradiation spot must be enveloped within the first irradiation spot (or *vice versa*).

In this regard, in the present method, the bias light serves to promote morphological changes of the recording film under optical recording so that the illumination spot by the second light beam must have a larger diameter than that of the first light beam spot, the second spot enveloping the first spot.

The rejection comments on the mobility behavior of the azobenzene molecules in connection with molecular structure and molecular weight limitations from a chemical standpoint. The inventive feature of the present method however, resides in the improvement of mobility of the azobenzene moiety caused by light irradiation, i.e. a physical means, so that the claimed method is further unobviously distinguished from the disclosures in the cited references.

In view of the different objectives and means to accomplish these objectives of the prior art, it is apparent that they are not properly combined and that the rejections thereon are based on an improper hindsight reconstruction of the present invention.

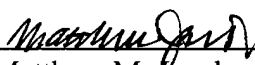
For the foregoing reasons, the rejections on prior art are untenable and should be withdrawn.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

Takashi FUKUDA et al.

By:   
Matthew M. Jacob  
Registration No. 25,154  
Attorney for Applicants

MJ/da  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
November 19, 2003